

o companies.
er 3300 products.
interoperable with each other.



The Smart Home is powered by Z-Wave.

- HOME
- ABOUT US
- ABOUT Z-WAVE
- CERTIFICATION
- PRODUCTS
- MARKETS
- MEMBERSHIP
- NEWS
- EVENTS
- TRAINING & EDUCATION

About Z-Wave Technology

The Z-Wave protocol is an interoperable, wireless, RF-based communications technology designed specifically for control, monitoring and status reading applications in residential and light commercial environments. Mature, proven and broadly deployed (with over 100 million products sold worldwide), Z-Wave is by far the world market leader in wireless control, bringing affordable, reliable and easy-to-use ‘smart’ products to many millions of people in every aspect of daily life.



[Privacy & Cookies Policy](#)

For a more complete look at Z-Wave technology for non technologists, and to learn more about Z-Wave's role as a key enabling technology for the Internet of Things and connected objects, please visit www.z-wave.com.

Z-Wave Technology Essentials:

- Low Powered RF communications technology that supports full mesh networks without the need for a coordinator node
- Operates in the sub-1GHz band; impervious to interference from Wi-Fi and other wireless technologies in the 2.4-GHz range (Bluetooth, ZigBee, etc.)
 - [See the frequency coverage information here.](#)
 - The Z-Wave PHY and MAC layers are defined by ITU-T Recommendation G.9959.
 - More detail regarding the frequencies used by Z-Wave can be found in Z-Wave Alliance Recommendation ZAD12837, "[Z-Wave transceivers – Specification of Spectrum Related Components](#)"
- Designed specifically for control and status apps, supports data rates of up to 100kbps, with AES128 encryption, IPV6, and multi-channel operation
- Full interoperability through layer 6 with backwards compatibility to all versions.
- Successfully bridged and trialed with OpenADR, SEP 1, SEP 1.1 and other Smart Energy protocols.
- Shares the same position in the NIST / SGIP Catalog of Standards as the IEEE 802.11 and 802.15 and 802.16 families
- For more in-depth technical materials on Z-Wave, please visit our [Developer Section](#), or consider [membership in the Z-Wave Alliance](#).

Z-Wave Market Facts:

- Over 3,300 interoperable products available, 100 million Z-Wave products worldwide.
- Extensively used in residential systems throughout numerous business spectrums, including ADT, Alarm.com, AT&T, DSC, GE/Interlogics, Honeywell, Lowes, Verizon, Vivint, and other prominent service providers worldwide.
- Found in thousands of hotels, cruise ships, and vacation rentals; including 65,000 devices in the flagship Wynn Hotel in Las Vegas, NV.
- Actively supported by over 700 manufacturers and service providers throughout the world.

[Privacy & Cookies Policy](#)

- Designed specifically for control, monitoring and status operations; no interference from Wi-Fi or other 2.4GHz wireless technologies in similar band.

SEARCH

FEEDBACK

We welcome your feedback! Please feel free to email us your thoughts and questions.

DATA PRIVACY & COOKIE POLICY

Please click here to view our Data Privacy & Cookie Policy.

SILICON LABS

Visit Silicon Labs to learn more about the company behind the Z-Wave Technology.

To report a Z-Wave security issue click here.

Z-WAVE.COM

Consumers can visit Z-Wave.com to learn more about Z-Wave, its many benefits, and how to get started using Z-Wave in your home.

Copyright © 2020 Z-Wave Alliance, All rights reserved.

The Z-Wave Alliance | 3855 SW 153rd Drive, Beaverton, OR 97003 USA | Tel: +1.503.619.0851

The Z-Wave® trademark and Z-Wave specification are owned by Z-Wave Alliance. The information stated in this website is for reference only and should not be relied upon for technical or other purposes. The Z-Wave Alliance provides no warranty or guarantee on any part of the Z-Wave technology and disclaims all implied warranties concerning the accuracy or timeliness of information presented on this website.

[Privacy & Cookies Policy](#)